

WHAT IS CLAIMED IS:

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suba 1. A bearing structure, comprising: an inner ring; an outer ring disposed on the outer periphery of said inner ring; and a rolling element rollably and rotatably sandwiched between said inner ring and said outer ring; and which is capable of supporting a first member mounted on the inner periphery of said inner ring and a second member mounted on the outer periphery of said outer ring in a relatively rotatable manner;

wherein at least either said inner ring or said outer ring is formed to protrude in the direction of the rotation axis of said relative rotation more than the other of said outer ring or inner ring; and

wherein a supporter for engageably supporting a third member which integrally rotates with said inner ring or said outer ring or which stands still is formed on the outer periphery of the inner ring formed to protrude in said rotation axis direction or on the inner periphery of the outer ring formed to protrude in said rotation axis direction.

continuation

2. A bearing structure according to claim 1, wherein said third member is engaged with and supported by a supporter formed on the outer periphery of said inner ring or a supporter formed on the inner periphery of said outer ring; and is also spline-engaged with the first member mounted on the inner periphery of said inner ring or the second member mounted on the outer periphery of said outer ring.

suba 3. A bearing structure according to claim 1, wherein said

outer ring constitutes an inner race, said inner ring constitutes an outer race, said rolling element is formed of a plurality of balls sandwiched and set between said inner race and said outer race, and, as a whole, constitute a radial ball bearing.

4. A bearing structure according to claim 1, wherein said outer ring constitutes an inner race, said inner ring constitutes an outer race, said rolling element is formed of a plurality of rollers sandwiched and arranged between said inner race and said outer race, and, a radial roller bearing is constituted as a whole.

5. A bearing structure according to claim 1, wherein said first member consists of a pump impeller hub connected to the pump impeller of a torque converter, said second member consists of a case for supporting said torque converter, and said third member consists of a rotation member which is spline-engaged with and mounted on said pump impeller hub and which rotates integrally with said pump impeller hub.

6. A bearing structure according to claim 5, wherein said rotation member consists of a drive sprocket for driving, via a chain mechanism, a hydraulic pump mount on said case.

7. A bearing structure according to claim 1, wherein said inner ring is formed such that the width in the axial direction thereof is longer than the width in the axial direction of said outer ring and protrudes in the axial direction, a fit-engagement/support peripheral face

is formed on the outer peripheral face of said inner ring protruding in this way, and said engagement/support peripheral face constitutes said supporter for engageably supporting said third member.

8. A bearing structure according to claim 1, wherein said outer ring is formed such that the width in the axial direction thereof is longer than the width in the axial direction of said inner ring and protrudes in the axial direction, an engagement/support peripheral face is formed on the inner peripheral face of said outer ring protruding in this way, and said engagement/support peripheral face constitutes said supporter for engageably supporting said third member.

9. A bearing structure according to claim 1, wherein said inner ring and said outer ring respectively protrude in axially opposite directions, two engagement/support peripheral faces are formed on the outer peripheral face of said inner ring and on the inner peripheral face of said outer ring which protrude in this way, and said two engagement/support peripheral faces respectively constitute said supportes for engageably supporting said third member.